

Understanding the Cognitive Processes of Neuroscientists at Work



William Safire shares the Dana Center's unique architectural history with the workshop participants.

The Dana Center in Washington DC hosted a group of 30 neuroscientists and architects for a three-day workshop, May 8 – 10, on “Neuroscience Laboratory Design: Understanding the Cognitive Processes of Neuroscientists at Work”. The event, produced by the Academy of Neuroscience for Architecture (ANFA), provided an opportunity for neuroscientists to critically examine environments most familiar to them – their own laboratories and offices – in an effort to foster dialogue exploring the interface between the neural and architectural aspects of these environments.

The welcome address, led by **William Safire**, chairman of the Dana Foundation, and **John Eberhard**, ANFA's Founding President, was followed by a series of presentations describing the broad range and the specificity within that range of what constitutes a “neuroscience lab”. Teams of interdisciplinary working groups spent a day's session examining Creativity, Productivity, Stress, and Memory, the performance outcomes of a neuroscientist. Recognizing that different environmental conditions exist for different cognitive activities, the general question posed to the groups was: what might be the environmental characteristics of a “cognitively reinforcing space”, and how can we test this? By fleshing out potential connections and convergence points between a neuroscientist's physical space and the desired performance outcomes, the working groups were able to hypothesize about how these processes may be influenced by the designed environment.



Steelcase's Margaret Alritz interviews Dr. Eduardo Macagno (UCSD) about spaces that enforce different cognitive activities.



Dr. William Kristan and Norman Koonce, FAIA.

The workshop concluded with presentations from each working group speculating on potential research questions and hypotheses, appropriate metrics and “baselines”, and how to construct research paradigms in which to study these questions. For example, the group on Memory suggested potential fMRI studies on contextual and technological means of stimulating recall and generating internal cuing, while the group on Creativity

discussed the sociological implications of creating positive feedback loops and collaborations through spatial adjacencies.

ANFA was established in 2003 to promote and advance knowledge that links neuroscience research to a growing understanding of human responses to the built environment. ANFA became a partner of the Dana Alliance in 2006.

This workshop was made possible by the generous financial support of Steelcase, Inc., and additional funding from the Dana Foundation. A workshop report will be available on ANFA's website in the upcoming months: www.anfarch.org.

Photos courtesy of Weiner Productions.